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IN THE SPECIFICATION:

**Please amend the paragraph on page 2, commencing with "The Present Invention ...", as follows:**

– The present invention reduces the difficulties and disadvantages of the prior art by providing an Internet Protocol (IP) network or circuit that allows integrated high-speed multimedia digital communication between Local Area Networks (LANs) located within or between train vehicles. A novel digital link is provided, which connects the LANs and the train vehicles together and communicates the data therebetween via an interface. Advantageously, the LANs are used to transmit bi-directional multimedia and data signals at high speed to the remote locations in the train while significantly reducing or essentially eliminating the aforesaid problems of poor quality reception and transfer of data. In addition, the circuit uses well-established IEEE 802.3 technology, commonly referred to as ETHERNET™ technology, and provides multiple ports to attach peripheral devices thereto. The single digital link is easy to connect between train vehicles and is significantly user-friendlier than the aforesaid connections. In addition, the IP network supports different data links and physical layer technologies, such as Wireless Local Area Network and the like. The IP network provides static and dynamic mobility that enables operation during a train's travel and during the interchange of cars, without the need to reboot the system network. The network has a reliable open architecture that is easy to upgrade by adding or withdrawing new or existing network communication devices such as, for example, video monitors and the like. Moreover, the network is adaptable to the type of environment associated with trains, buses, subways, trams and the like, and reliably operates where high levels of vibration, temperature, and electromagnetic fields occur. —

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**Please amend the paragraph on page 3, commencing with "In accordance with an aspect ...", as follows:**

-- In accordance with an aspect of the present invention, there is provided a communication circuit for use within a vehicle, the circuit comprising: a first network port; and a second network port located remote from the first network port and digitally connected thereto, wherein the first and second network ports are digitally connected to one another via an IEEE 802.3 digital link and using Internet Protocol so as to enable high speed audio and video signal communication therebetween ~~for digitally communicating a signal therebetween.~~ --

**Please amend the paragraph on page 3, commencing with "Preferably each network segment ...", as follows:**

-- Preferably, each network segment includes a multi-port network hub, the first and second network ports being connected to their respective multi-port network hubs. Conveniently, at least one peripheral network communication device is connected to each of the multi-port network hubs. Conveniently, at least one of the peripheral devices is a control head. Conveniently, at least one peripheral communication device is connected to the control head. Each multi-port network hub is a multi-port ETHERNET<sup>TM</sup>, i.e. IEEE 802.3, network hub. --

**Please amend the paragraph on page 4, commencing with "In accordance with another aspect ...", as follows:**

-- In accordance with another aspect of the present invention, there is provided a communication circuit for use on board a train having at least two vehicles coupled together, the circuit comprising: a first Local Area Network having a first interface and located in one vehicle; and a second Local Area Network having a second interface and located in the other vehicle; and the first interface and the second interface being connected by a digital link for digitally communicating a signal between the first and the second Local Area Networks, wherein the first

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interface and the second interface are digitally connected to one another by a RS-485 digital link and using a Local Area Network Internet Protocol-based protocol so as to enable high speed audio and video signal communication between the first and the second Local Area Networks. --

**Please amend the paragraph on page 5, commencing with "Referring now to Figures ...", as follows:**

-- Referring now to Figures 1 and 2, a first train vehicle is illustrated generally at 10 and is subdivided into three articulated car sections 12a, 12b, and 12c. A second train vehicle 14, which may also be articulated and sectioned, is connected to the first vehicle 10 by train couplers 18, 18'. One skilled in the art will recognize that although the illustrated embodiment is a train, the present invention can also be used with other ground-based vehicles without deviating from the scope of the invention. Broadly speaking, the first train vehicle 10 includes an embodiment of an Internet Protocol (IP) network or circuit for integrated communication on board a train in accordance with the present invention. The circuit includes a first Local Area Network (LAN) 20 that is connected to a second LAN 21 located in the second train car 14 via a digital RS-485 train coupler link 24 for communications between the two train vehicles 10, 14. This establishes a bi-directional and transmission of an RS-485 digital signal between the two train vehicles 10, 14. For communication between the LANs segments located within each of the train vehicles 10, 14, an ETHERNET™ digital link is used. Both the LANs are preferably based on ETHERNET™ technology as will be described below. For the purposes of this description, and as is well known in the art, the term ETHERNET™ designates equipment, connections, communications or the like which implement the IEEE 802.3 standard. --